

## ABSTRACT

Disclosed is a method for removing an analyte from blood cells that results in a preparation of blood cells in which the level of the residual analyte is significantly reduced in the cell population. The method can be performed on large volume blood cell suspensions, and the cells prepared in this manner remain viable following prolonged storage and are suitable for therapeutic use, e.g. in transfusion applications. A preferred blood cell preparation is one that includes a red blood cell (RBC) population.